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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,710	07/03/2003	Kazutoshi Toda	F-7877	5029
28107	7590	03/17/2004	EXAMINER	
JORDAN AND HAMBURG LLP 122 EAST 42ND STREET SUITE 4000 NEW YORK, NY 10168			SMITH, JULIE KNECHT	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/613,710	TODA ET AL.	
	Examiner	Art Unit	
	Julie K Smith	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 July 2003.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 20-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 20-24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 03 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 10/057051.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20-22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Onuki et al. (JP 11097510).

Regarding claims 20-24, Onuki et al. discloses a vehicle use bearing apparatus (see figs. 1 and 4) comprising a hub wheel to which a wheel is attached and a double row tapered roller bearing with a vertex of contact angles outside of the bearing to be attached to an outer periphery of said hub wheel. Onuki et al. further discloses the tapered roller bearing including a single outer ring (see fig. 4, 11a) having two rolling contact surfaces (15,16) adjacent in an axial direction, an inner ring (13,14) on a vehicle inner side corresponding to the rolling contact surface of said outer ring on the vehicle outer side, and a plurality of tapered rollers (4) arranged between the rolling contact surfaces of said outer ring and both inner rings, and a cone back face rib (22) which is expanded outwardly in the radial direction to a large diameter side of the rolling contact surface of said inner ring, wherein a shaft end (25) on a vehicle inner side of said hub wheel is bent outwardly in a radial direction so as to be caulked to an end surface of said inner ring (13) on the vehicle inner side in said tapered roller bearing. Onuki et al. further discloses a raceway track (18) of said inner ring on the vehicle inner side in said tapered roller bearing is

designed so as to satisfy a condition that a form is secured in a state that the raceway track is elastically deformed due to the caulking (see abstract). Onuki et al. further discloses a condition such that an angle of the rolling contact surface of said outer ring before the caulking, is set to an angle obtained by subtracting a fluctuation angle of the rolling contact surface where the raceway track of said inner ring or outer ring secures a required form (see fig. 2) and a tilt angle of the inner wall surface of said cone back rib (22) with respect to the radial direction before caulking is obtained by adding a fluctuation tilt angle due to the caulking to a tilt angle after the caulking (see fig. 2).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onuki et al. as applied to claims 20-22 and 24 above, and further in view of Pressler (5,702,162). Onuki et al. discloses a bearing as claimed, but does not disclose an equal velocity joint. However, Pressler teaches a wheel hub having an equal velocity joint attached to the center hole of said hub wheel so as to be rotatively integral with said hub wheel in a state that said joint is close to said tapered roller bearing (30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Onuki with the teachings of Pressler as it is old and well known in the art to provide an equal velocity joint on a wheel hub.

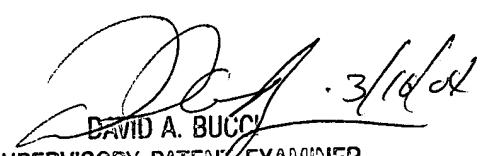
***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K Smith whose telephone number is 703-305-3948. The examiner can normally be reached on Monday-Friday, 8-5:30, (Every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JKS  
Jks  
March 15, 2004

  
DAVID A. BUCCI  
SUPERVISORY PATENT EXAMINER  
TECH 1100 3682 3600  
3/16/04